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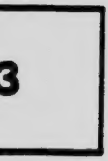

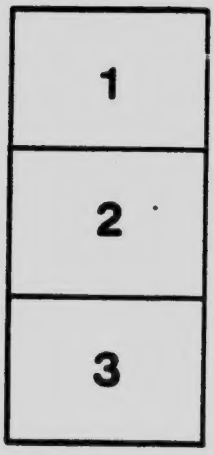

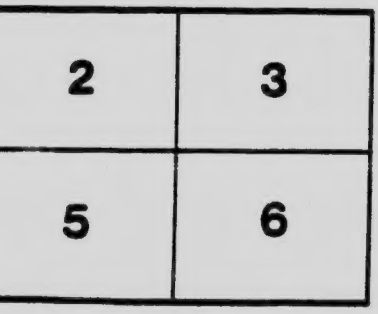

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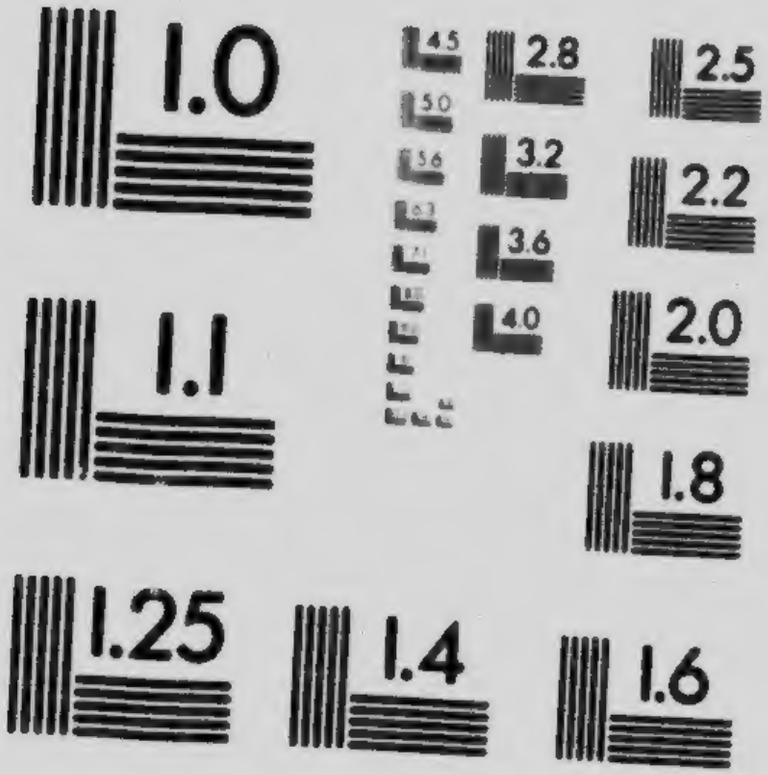

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REPORT

OF THE

CANADIAN ARCTIC EXPEDITION 1913-18

VOLUME III: INSECTS

PART B: NEUROPTEROID INSECTS

By NATHAN BANKS

SOUTHERN PARTY—1913-16

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OTTAWA
J. de LABROQUERIE TACHÉ
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1918

Vol. iii—54630—1

Issued July 11th, 1919

The Neuropteroid Insects of the Canadian Arctic Expedition, 1913-18.

By Nathan Banks.

The Neuropteroid insects taken by the Canadian Arctic Expedition, 1913-16, belong to seven species, two of which are herewith described as new. Most of the specimens collected by Mr. Frits Johansen belong to one species which is common in the Arctic regions.

PERLIDAE.

Alloperla pacifica Banks.

Two from Ketchikan, southern Alaska, September 10, 1916.

Nemoura, sp.

Several specimens, quite possibly of a new species, from Bernard harbour, Northwest Territories, June 30, 1916, and July 30, 1916. They are in poor condition and cannot now be described.

Capnia nearctica, n. sp.

Black. Body long and slender. Pronotum plainly broader than long, a little broader behind than in front, with a deep transverse groove in front parallel to the front margin. Wings in the male not reaching one-fourth way to the tip, in the female reaching to the tip of body. Setæ about one-half the length of the body. In the male the third segment from the tip has a rather large, rounded, median elevation, the surface of which is deeply pitted and provided with short hairs, and behind over the last two segments is a median groove bordered by nearly parallel elevated ridges; in the posterior part the ridges swell out a little; the groove is fully two and a half times as long as broad.

Length, 6 mm.

Many specimens from Bernard harbour, Northwest Territories, Canadian Arctic Expedition, June 25, 1915 (F. Johansen, coll.). Type in Canadian National Collection of Insects, Ottawa, paratype in Museum of Comparative Zoology, Cambridge, Mass. Differs from other species in the shape and sculpture of the tubercle near tip of body.

TRICHOPTERA.

Rhyacophila alberta Banks.

One from Ketchikan, southern Alaska, September 10, 1916.

Chilostigma præterita Walker.

Many specimens. All taken at Bernard harbour, Northwest Territories, September 23, 1915. There is much variation in the extent of the markings on the front wings almost uniformly dark-coloured. Described from Canada. I have seen it from several northern localities and it also occurs in the more northern parts of Europe.

Anabolia emarginata, n. sp.

Black with black bristles, some yellowish bristles on vertex and thorax; antennæ narrowly annulate with pale; legs yellowish brown, spines black. Fore-wings blackish, outer and posterior portions with scattered small pale spots, a distinct whitish hyaline spot over the thrydium and one below it near the end of the anal vein; the hind wings are greyish, darker on the anterior tip; genitalia dark. Venation much as in *A. nigricula* but the wing is rather shorter so that the apical cells are noticeably shorter than in that species. Male genitalia, seen from above show two upper appendages close together, each with an excised tip; from the side the lower appendage is seen to be tipped with two little black teeth. In general similar to *A. nigricula* but the shape of the superior appendages is different, and they are shorter than in that species.

Expanse, 26 mm.

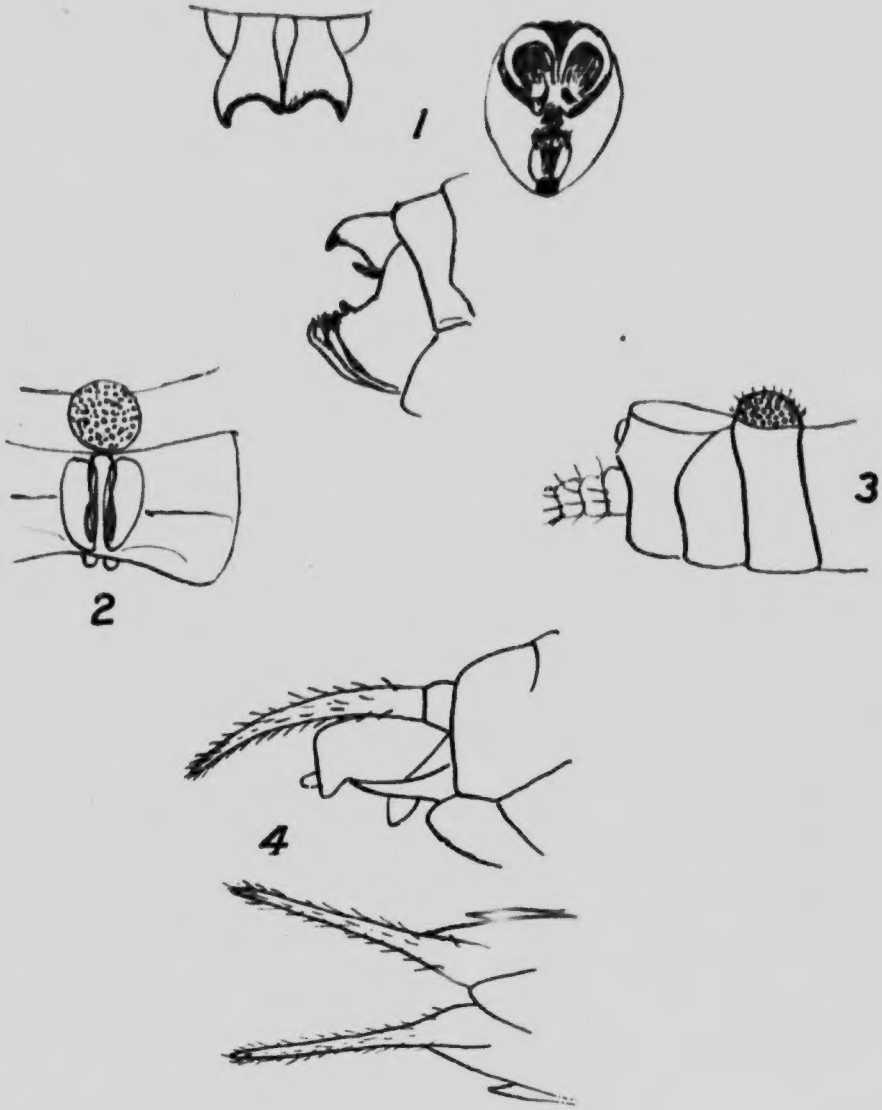
Two males from Teller, Alaska, July 29, 1913 (F. Johansen, coll.) Type in Canadian National Collection of Insects, Ottawa, paratype in Museum of Comparative Zoology, Cambridge, Mass.

Limnephilus, sp.

One female from Nome, Alaska, August 21, 1916 (F. Johansen, coll.) may be the female of *L. harrimani* Bks., known only from the male. *L. harrimani* is closely related to *L. sitchensis*, and so is this form. The body is greyish brown; vertex and thoracic vittæ dull black, latter separated by a grey streak; vertex between lateral ocelli and eyes grey pollinose; palpi, antennæ and legs yellowish, latter with black spines, basal joints of antennæ dark; genitalia pale. Fore wings yellowish brown, marked with darker brown and whitish hyaline much as in *L. sitchensis*; an oblique mark across the thyridial cell, and a large area each side of the anastomosis hyaline, this spot extends over bases of apical and first subapical cells and the tips of discal and thyridial cells. The dark brown is mostly on the posterior part, and along the veins; veins pale, anastomosis and lower stigmal vein darker; hind wings grey hyaline, veins pale. Face with yellowish hair in the middle and black on the sides, vertex, pronotum and mesonotum mostly with yellowish hair; some macrochatæ on vertex dark. Fore wings have the shape of *L. sitchensis*; the discal cell is plainly longer than its pedicel; the first apical is wider at base than the second, the fourth is about one-third as wide at base as the third or fifth; in the hind wings the fourth apical cell is slightly pedicellate. The superior appendages of the female are very long, slender, and divaricate, longer than in *L. sitchensis*, the inferior appendage is much shorter than in that species.

Expanse, 29 mm.

NOTE.—The collection also included a number of immature stages of Neuropteroids, the identification of which was not possible.



EXPLANATION OF PLATE.

Fig. 1. Dorsal, posterior and lateral views of male genitalia of *Anabolia emarg*

2. Dorsal view of tip of male abdomen of *Capnia nearctica*.

3. Lateral view of tip of male abdomen of *Capnia nearctica*.

4. Lateral and dorsal views of female genitalia of *Limnephilus* sp.